



PENPOWER DIESEL GENERATORS

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PenPower Diesel Generators are long standing generator manufacturers based in Cape Town, South Africa. Working with dependable engine and alternator partners, PenPower are able to offer a product with cutting edge design and unrivalled support

Since 1965



PenPower Pp22.5D

	Prime kVA	Prime kW	Standby kVA	Standby kW
Output	20	16	22	14
Rating	50Hz, 400v 3ph			

Rating definitions

Prime Power - This rating is applicable for supplying continuous electric power (at variable load) in lieu of commercially purchased power. 10% Overload power is available for 1 hour in 12 hours continuous operation.

Standby Power - This rating is applicable for supplying continuous electric power (at variable load) in the event of an utility power failure. No overload is permitted for this rating.

Standard reference conditions

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This Generating set is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and higher altitudes. De-rating may apply, please consult us for a site rating.

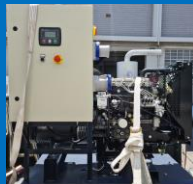
Perkins Powered generators



Our Pp range of Generators are powered by the proven Perkins engines. Perkins, a Caterpillar company is one of the worlds leading engine manufactures. Manufacturing diesel engines for multiple applications in many different industries. This variety of applications resulted in Perkins having one of the worlds best support networks no matter where in the world you may be. Perkins not only offers proven reliability and leading efficiency but can also be backed up with in territory support.

Open set dimensions

Length	1490	mm
Breadth	520	mm
Height	1180	mm
Weight	533	kg
Fuel tank	51	L



Canopy set dimensions

Length	1910	mm
Breadth	860	mm
Height	1265	mm
Weight	820	kg
Fuel tank	58	L

Metal treatment and coatings

For the canopies: Canopy wall is made of Z275 Galvanised steel sheets 1.5 mm thick. Surface treatment pre-coating includes degreasing and phosphating dipping, electro-static powder coating applied on the surface up to 80 microns, then cured at temperature of 220°C.

For base frames: Base frame structure is made of Hot Rolled steel sheets 2.8 mm thick. Surface treatment pre-coating includes shot blasting to Swedish standard S.A 2.5degrees followed by surface cleaning, electro-static powder coating applied on the surface up to 80 microns, then cured at temperature of 220°C.



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Engine



Engine Model	404A-22G1
Number of Cylinders	4 inline
Induction system	Naturally Aspirated
Cubic capacity	2.2L
Bore x Stroke	84 x 100
Governor	Mechanical
Coolant capacity	7L
Compression Ratio	23.3 : 1
Lubricating oil capacity	10.6L
Fan air flow	0.49 m3/sec
Exhaust gas flow	3.64m3/min
Electrical system voltage	12v

Fuel Consumption

110%	6.1L/hr
100%	5.3L/hr
75%	4L/hr
50%	2.9L/hr
25%	-

Alternator



Make	Voltazz
Model	V184G
No of bearings	1
Total harmonic content	<2%
Ingress protection	IP23
Excitation	Self excited
Winding pitch	2/3
AVR model	AS440
Voltage regulation steady	+1%
Winding	311
Duty/temp rise/ ambient	cont. / 125K/ 40deg C
Output	31.3 kVA
Insulation class	H
Insulation method	Tripple dipped in thermosetting polyester varnish which is liquid, oil & acid resistance



Controller



DSE6120MK3

Auto start control model for single set applications
Compatible with DSE WebNet and DSE890, optional
networking solutions

Metering and Alarms:

- Generator Frequency / Engine RPM
- Under and overspeed protection
- Generator Volts L-L and L-N
- Generator current
- Generator kW and kVA
- Engine oil pressure and temperature
- Fuel level with warning and shut down (optional)
- Run hours
- Charge fail as well as low DC voltage

DSE WebNet (optional)



DeepSea's remote monitoring, remote operation and early notification system available as optional. Module is as easily added post or pre commissioning



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Warranty

We got your back

All Penpower generators are covered by a PenPower warranty. Further Major components also carry their own warranties. All active warranties run concurrently and do not impact on one another. Warranty procedure can be carried out via PenPower and affiliated agents as well as component manufacturers support networks.

Perkins warranty summary

detailed warranty policy is available on request

Perkins at its sole discretion, by repair or replacement, remedy any failure of an engine which is due to a defect in the workmanship or materials. Perkins will accept responsibility for reasonable travel, labour and material costs that are applied when effecting such remedy. All warrantable repairs must be carried out by an authorized Perkins outlet using trained technicians and genuine Perkins replacement parts

Engine(s) or components supplied as replacements under warranty will assume the identity of the engine or part being replaced at the time of the original failure and therefore will assume any residual warranty term. Any engine or component replaced at the time of the original failure and therefore will assume any residual warranty term. Any engine or component replaced shall be disposed of in accordance with the directs given by Perkins or in accordance with any applicable local laws

The warranty extends to the costs of the engine removal and re-installation in approved applications and will be subject to repair time limitations which should be in the Warranty Manual Supplement along with specific Repair Time Schedules by product range

Duration

Prime 12 months

Prime major components 24 months

Standby 36 months

Voltazz warranty summary

detailed warranty policy is available on request

All Voltazz alternators carry a warranty of 12 months from date in service or 24 months from alternator invoice date, whichever ever occurs first. All warranties must be submitted within this timescales otherwise they will be invalid unless previously agreed in writing

During the warranty period, should the alternator fail due to faulty design, materials or workmanship, we undertake to rectify by replacement or repair at our option

PenPower Diesel Generators : end-user warranty

This is a warranty which applies to all generating sets furnished by PenPower Diesel Generators (hereinafter referred to as "the company"). All generating sets are warranted against defects in materials and workmanship for a period of twelve months from the date of initial start-up. This warranty coverage is only applicable to the first end user of the generating

The company's responsibilities

If a defect in material or workmanship arises during the warranty period the company will:

Replace or, at the company's discretion, repair the defective parts.

Provide for reasonable and customary labour costs incurred while effecting repairs to engine defects in accordance with the policies and repair times laid down by the engine manufacturer.

Provide for the cost of service supplied such as coolant, oil and filters which are made unserviceable by the defect.

The user's responsibilities

The user is responsible for:

Installing and operating the generating set in accordance with the manufacturer's instructions

Returning the warranty registration form within ten days from the date of start-up or one month from the date of sale, whichever is earlier.

Ensuring that the initial start-up is performed by an authorized representative company or its distributors or agents

Exceptional Circumstances

In exceptional circumstances, the said start-up will be waived but only if a pre-delivery inspection has been completed.

Conditions

This warranty is conditional on the user's agreement to accept.



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It is at the company's sole discretion as to whether the faulty part is defective in material or workmanship
Labour costs, except as stated under "the company's responsibility" including costs incurred in removing and replacing the engine, (though consideration will be given by the company in certain circumstances)
The costs and risks for the transporting / shipping and other charges associated with the replacement of the repair parts.
Any costs in excess of the purchase price of the product
Other miscellaneous costs including but not limited to travel, mileage, lodging, taxes, telephone calls and overtime, except as stated under "the company's responsibilities"
His obligation to make complete payment for the purchase of the equipment, parts per services relating to the equipment under warranty.

Limitations, this warranty does not cover

Defects due to the user's improper installation, maintenance or use.
Alterations or repairs not authorized by the company in writing
Any operation in excess of the company's rating or outside of the stated site conditions
Normal wear and tear

This warranty is expressly in lieu of all other warranties, express or implied, including, but not limited to, any warranty of merchantability or fitness for the particular purpose. All warranties which exceed the aforementioned obligations are hereby disclaimed by the company and excluded from this warranty. The company shall, under no circumstances, be held liable for any special direct, indirect, incidental or consequential damages – in particular, when the product is operating in conjunction with a transmission system where there is a risk of potentially damaging electrical stresses in the event of transmission failure. All claims made under the warranty should be made by contacting your local distributor or agent or the company who will outline the administration and scope.